day. The sample comprised 72 radiographs, 36 lateral cephalometric and 36 cavum. The radiographs were digitized and processed using the cephalometric software, CefX. The results were based on the Schulhof method (Ricketts, 1998), which has four cephalometric measurements (airway occupation percentage, D-AD1: ENP, D-AD2:ENP, D-VPT:AD). At the end an index was calculated representing a summary of all measurements taken. A Student's paired *t*-test, chi-square, Pearson correlation and Kappa index were calculated to analyze the results.
RESULTS: Only the values for airway occupation percentage were significantly different ($P = 0.006$) between the analyzed radiographs. A high degree of correlation was found for all measurements, including the index values.
CONCLUSION: Both lateral cephalometric and cavum radiography can be used for the evaluation of nasopharyngeal airway space.

141 REFERRAL PATTERNS OF DUTCH GENERAL DENTAL PRACTITIONERS TO SPECIALIST ORTHODONTISTS

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AIM: To investigate current referral patterns of Dutch general dental practitioners (GDPs) to orthodontic specialists.
MATERIALS AND METHOD: A specifically designed questionnaire was sent to a random sample of 634 GDPs in the Netherlands. This questionnaire comprised four parts. In part A general characteristics of the GDPs were collected such as gender, years in practice, organisation of the dental practice, possibilities to refer to an orthodontist, number of patients referred to the orthodontist per year. Part B assessed the importance of each of the total of 20 various factors to the GDPs' usual referral decision. Each item was presented on a scale of 1-4 (1 = not applicable at all; 4 = totally applicable). Parts C and D consisted of open-ended questions; the GDPs were asked to give the three most important reasons for referring or not referring to a specific orthodontist.
RESULTS: The response rate was 60 per cent. There were no significant differences in the response rate of male and female GDPs nor was there a relationship between the response rate and the years in practice. Most GDPs refer to 1-2 different orthodontic specialists. The factors with the highest mean scores were 'Patient satisfaction' (mean 3.35, SD 0.040), 'Favourable experience in the past' (mean 3.26, SD 0.047) 'Oral hygiene monitoring by the orthodontist' (mean 2.97, SD 0.046) and 'Orthodontist is kind to children' (mean 2.90, SD 0.048). The order of the four most important factors appeared to be the same for male and female GDPs, and for dentists who graduated shorter or longer than 16 years ago.
CONCLUSIONS: The most important factors governing the choice of an orthodontic treatment provider by GDPs were patient satisfaction, favourable experience in the past and oral hygiene monitoring by the orthodontist. These findings were quite consistent among different groups of GDPs.

142 A META-ANALYSIS OF MANDIBULAR INTERMOLAR WIDTH POST-RETENTION AFTER EXPANSION.

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AIM: Controversy still exists concerning whether mandibular intermolar expansion, obtained during orthodontic treatment, can be maintained without relapse in the post-retention period. A meta-analysis was performed to evaluate changes in mandibular intermolar width post-treatment and post-retention after expansion in non-extraction treatment.
MATERIALS AND METHOD: Published data on increases in mandibular intermolar width were selected on the basis of strictly imposed criteria: the post-retention period had to be at least 1 year, the mean expansion of the mandibular intermolar width needed to be greater than 1.5 mm, only patients with non-extraction treatment were included in the study, and intermolar width measurements were made on dental casts pre- and post-treatment and post-retention. Global means, with standard deviations, were computed with 95 per cent confidence intervals. The paired Student's *t*-test (significance level = 0.05) was used.
RESULTS: Twelve articles (total number of patients) were identified. During treatment, the mean intermolar width increased 2.47 mm, whereas in the post-retention period the loss of mandibular intermolar expansion was 0.24 mm, resulting in a net expansion of 2.23 mm. Post-retention data showed a total loss of 9.7 per cent of the initially obtained transverse expansion. The stability of the mandibular intermolar expansion in the post-retention period can be explained by the marked intercuspation of the mandibular and maxillary molars.
CONCLUSION: Intermolar width can be expanded without a significant clinically important relapse in the post-retention period.